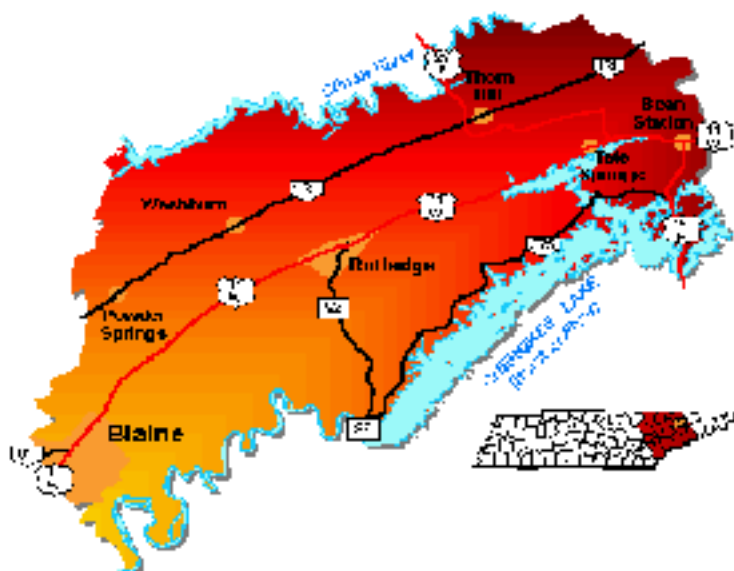


COMMUNITY DIAGNOSIS

Status Report



GRAINGER COUNTY

1999

Tennessee Department of Health
East Tennessee Regional Health Office
Community Development Division

Community Diagnosis

**Grainger County Health Council
Community Diagnosis Report
Prepared June 1999**

By

**The Community Development Division
East Tennessee Regional Health Office**



INTRODUCTION

Community Diagnosis is a community–based community–owned process to identify and address health needs of Tennesseans. As a health assessment and planning process, Community Diagnosis involves:

- ⇒ Analyzing the health status of the community.
- ⇒ Evaluating the health resources, services, and systems of care within the community.
- ⇒ Assessing attitudes toward community health services and issues.
- ⇒ Identifying priorities, establishing goals, and determining course of action to improve the health status of the community.
- ⇒ Establishing a baseline for measuring improvement over time.

In each county Community Diagnosis is implemented through the local county health council with support from the East Tennessee Regional Health Office. The Grainger County Health Council (GCHC) was established in 1998 “to increase the availability of necessary resources and education to promote optimal health, safety and well being of the citizens of Grainger County”. A list of council members participating in the assessment can be found in Appendix A.

The GCHC began implementation of the Community Diagnosis process in 1998 by conducting a community survey. This was followed by reviewing various data sets and evaluating resources in the community to identify areas of concern that affect the health of Grainger County citizens.

As a result of the assessment process, the health council will develop a health plan for Grainger County. The Health Plan will contain goals to improve the health of Grainger County residents. Intervention strategies will be developed to deal with problems identified and a listing of resources needed to implement those strategies.

Benefits of Community Diagnosis for the community included:

- Providing communities the opportunity to participate in directing change in the health services and delivery system.
- Armed with appropriate data and analysis, communities can focus on health status assessment and the development of locally designed, implemented, and monitored health strategies.
- Provide justification for budget improvement request.
- Provide to state-level programs and their regional office personnel, information and coordination of prevention and intervention strategies at the local level.
- Serve health planning and advocacy needs at the community level. Here the community leaders and local health departments provide leadership to ensure that documented community health problems are addressed.

This document provides a description of the Community Diagnosis activities to-date. Data will be described with emphasis on important issues identified by the council. Summary findings from work done by other organizations will be included.

CONTENTS

INTRODUCTION

I.	COUNTY DESCRIPTION	1
	A. County Profile	1
	<i>Grainger County Community Profile</i>	<i>1</i>
	<i>Grainger County Selected Economic Indicators.....</i>	<i>1</i>
	B. County Process---Overview.....	2
	<i>The Assessment Process</i>	<i>2</i>
	<i>Resources.....</i>	<i>2</i>
II.	COMMUNITY NEEDS ASSESSMENT	3
	A. Primary Data	3
	1. The Community Stakeholder Survey.....	3
	<i>Grainger County Community Stakeholders Survey.....</i>	<i>3</i>
	<i>Results-Additional Stakeholders Questions</i>	<i>5</i>
	2. Behavioral Risk Factor Survey (BRFS).....	6
	B. Secondary Data.....	8
III.	HEALTH ISSUES AND PRIORITIES: IDENTIFICATION AND PRIORITIZATON	12
IV.	FUTURE PLANNING	13
V.	REFERENCES.....	14
	 APPENDIX A	 I
	A. Grainger County Health Council	II
	B. Health Information Tennessee (HIT)	II

TABLES

Tables

1. Health Care Resources 2

2. Reported Health Practices 6

3. Total 1998 Population and
Total Number of Households..... 8

4. Education 9

5. Employment..... 9

6. Poverty Status 9

7. Grainger County Health Issues Priorities 12

CHARTS

Charts

1.	Respondents-Grainger Community Stakeholder Survey	3
2.	Community Health Care Services % Responding “Not Adequate”	4
3.	Community Health/Social Issues “Yes A Problem”	4
4.	Sample Size—Grainger County Behavioral Risk Factor Survey.....	6
5a.	Community Issues % Saying “Definite Problem”	7
5b.	Access to Health Care Problems % Saying “Definite Problem”	7
6a.	Age Adjusted Mortality Rate Per 100,000 Population Suicide Homicide Motor Vehicle Crash Related	10
6b.	Age Adjusted Mortality Rate Per 100,000 Population Stroke Coronary Heart Disease	10
7.	Age Adjusted Mortality Rate Per 100,000 Population Female Breast Cancer Lung Cancer	11
8.	Perinatal Indicators.....	11

I. COUNTY DESCRIPTION

A. County Profile

Grainger County was established in 1796 from parts of Knox and Hawkins Counties. The county was named in honor of Mary Grainger wife of William Blount, Governor of the Territory of the United States, “South of the River Ohio”, and the founder of the City of Knoxville. She was the official first lady of the Southwest Territory from 1791 to 1796.

The county seat of Grainger County is Rutledge. Rutledge named in honor of General George Rutledge was incorporated in 1927.

Without a doubt, Grainger County is famous for their Grainger County tomatoes. Due to the geology (rainfall, soil and temperature), the tomatoes are exceptional. The tomato crops bring in ~7-8 million annually, tobacco bringing in ~6-7 million to the county with 50-75 tomato farmers versus 1000 tobacco farmers. To promote the tomato industry Grainger County holds an annual Tomato Festival, which draws approximately 14,000, to assist the farmers. The event includes arts & crafts, a beauty pageant, a softball tournament, entertainment and street dancing.

Grainger County Community Profile

Location

Region: East Tennessee

Square Miles: 310

Distance from Knoxville: 35 miles

Population (1998 est.)

Total: 19,462

Cities/Towns/Communities

Rutledge

Blaine

Bean Station

Thorn Hill

Washburn

Education

Joppa Elementary

Bean Station Elementary

Rutledge Elementary

Washburn K-12 School

Rutledge Middle School

Rutledge High School

Grainger County Adult High School

Natural Resources

Minerals: Marble, Manganese & Limestone

Timber: Red Oak & Hickory

Crops: Tobacco & Tomatoes

Climate

Annual Average Temperature: 56°

Annual Average Precipitation: 59”

Elevation: 1,350’ above sea level

Grainger County Selected Economic Indicators

Annual Labor Force Estimates (1998)

Annual Total Labor Force: 9,886

Number Employed 9,397

Number Unemployed: 489

+Unemployment Rate %: 5.0

+Annual unemployment rate dropped in 1998

Tax Structure

County Property Tax Rate per \$100 value: \$2.77

*Per Capita Income (1996 est.): \$14,455

Table 1
Health Care Resources

	County	Region	State
Persons per Primary Care Physician	8,651	1,776	1,053
Persons per Nurse Practitioner	17,301	7,429	7,134
Persons per Physician Assistant	-----	15,053	18,664
Persons per Registered Nurse	455	178	106
Persons 10-44 per OB/GYN	-----	4,509	2,100
Persons per Dentist	5,767	2,414	1,186
Persons per staffed hospital bed	-----	491	245
Percent occupancy in community hospitals	-----	57.3	57.7
Persons per staffed nursing home bed	131	119	135
Percent occupancy in community nursing homes	97.3	96.4	93.6

Physician shortage area for OB PARTIAL

Physician shortage area for Primary Care YES

Note: Manpower data are 1996; shortage areas, 1995; facilities, 1994.

Hospitals	# Beds	Nursing Homes	# Beds
No Local Hospital		Ridgeview Terrace of Life Care	132

B. County Process—Overview

The Assessment Process

The Tennessee Department of Health has made a strong commitment to strengthening the performance of the public health system in performing those population-based functions that support the overall health of Tennesseans: assessment, assurance, and policy development.

Community Diagnosis is a public-private partnership to define the county's priority health problems and to develop strategies for solving these problems. The Grainger County Health Council in collaboration with the East Tennessee Regional Health Office conducted an extensive assessment of the status of health in Grainger County. The health council contains community representatives from various geographic locations, social-economic levels, and ethnic groups. Extensive amounts of both primary and secondary data were collected and reviewed as the first step in the process. Major issues of concern identified by the community were perception and knowledge of health problems, which were important factors in analyzing the data. Council members identified major issues of concern and each issue was ranked according to size, seriousness, and effectiveness of interventions (Table 7).

Resources

The Grainger County Health Council is focusing on identifying existing resources. Cooperation of various agencies could allow redirection of such resources to target identified priorities. Grainger County Health Council is seeking these additional resources for the development and implementation of intervention programs for priorities identified through the Community Diagnosis process.

II. COMMUNITY NEEDS ASSESSMENT

A. Primary Data

1. *The Community Stakeholder Survey*

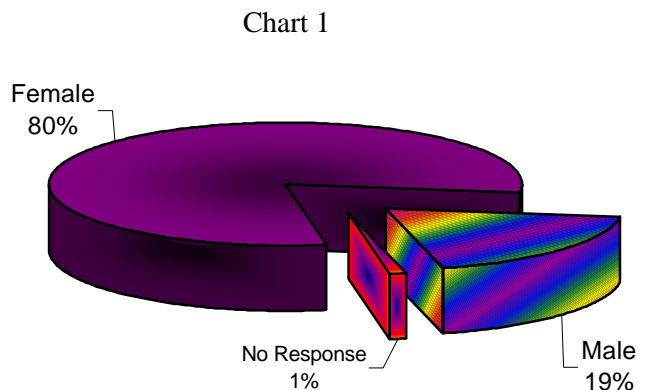
The stakeholder survey provides a profile of perceived health care needs and problems facing the community and stakeholders who respond to the survey. Stakeholders are those individuals in a community who have a special interest in a particular issue or action being taken. The survey includes questions about the adequacy, accessibility, and level of satisfaction with health care services in the community. Members of the council were asked to complete the stakeholders' survey as well as to identify and obtain comments from other stakeholders in the community. The Community Stakeholder Survey is not a scientific random sample of the community, rather its purpose is to obtain subjective data from a cross section of the community about health care services, problems, and needs in the county. It is one of two sources of primary data used in community diagnosis.

The Grainger County Stakeholder Survey was distributed to various individuals across the county. The stakeholders represent a cross section of the community, i.e., young families, single parents, the elderly, business leaders, consumers, rural residents and urban residents. The stakeholders include both the users and providers of health services. In addition, the Grainger County Health Council incorporated additional questions on issues they felt were important to the community's health into the random sampling Community Stakeholder Survey

Grainger County Community Stakeholders Survey

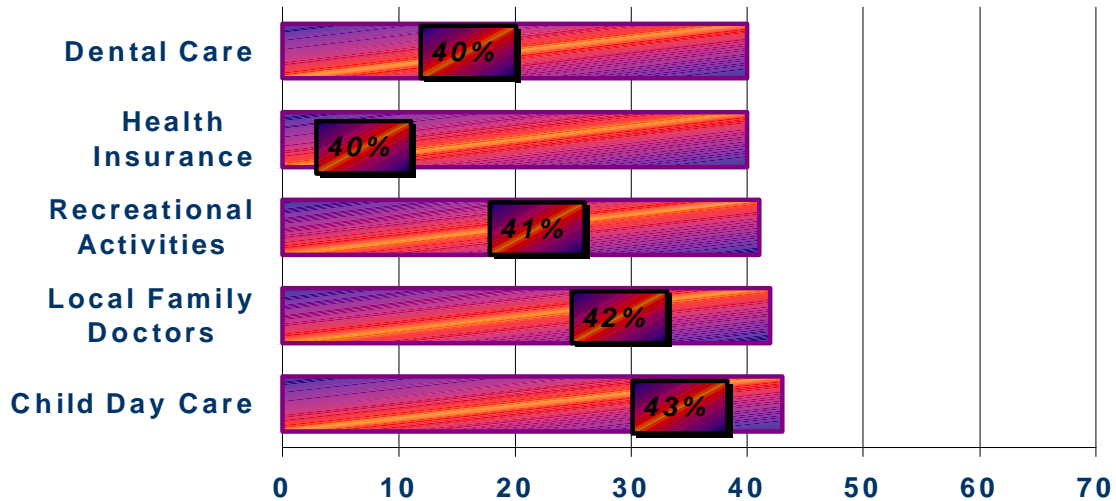
of respondents: 291
Male: 19%
Female: 80%

Over seventy percent of the respondents had lived in the county for ten or more years. Respondents were asked to rate various health services, as "adequate", "not adequate", "not available", or don't know. Thirty-eight percent of the respondents rated the community health services as "adequate".



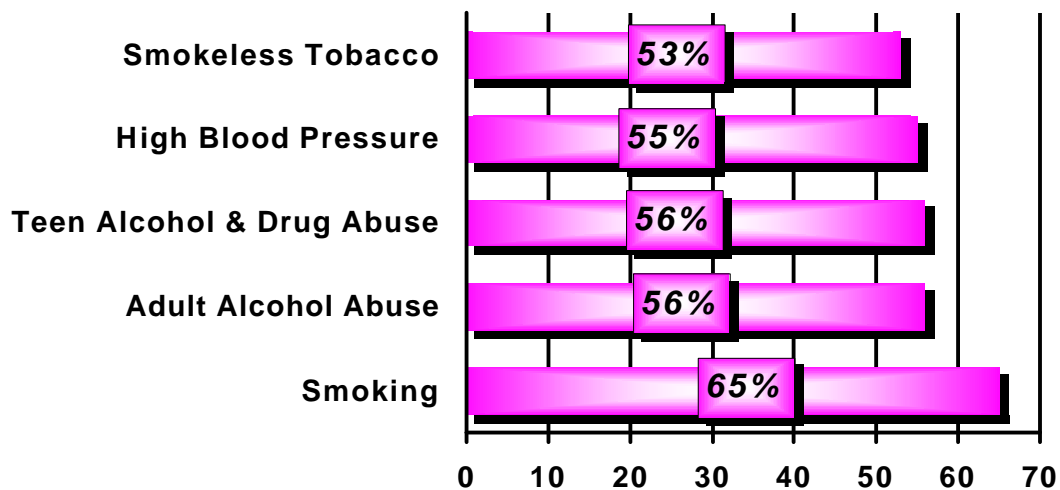
Data that concerned the health council were the ratings of "Not Adequate," and "Yes, a Problem," in the health services and health/social issues category. Forty-three percent of the respondents felt that child day care was available in the community but not adequate to address the need. The top five services that were ranked as available but not adequate also include Local Family Doctors, Recreational Activities, Health Insurance and Dental Care (Chart 2).

Chart 2
Community Health Care Services
% Responding “Not Adequate”



In the health /social issues category, sixty-five percent felt smoking was a problem in the community. The top five-health/social issues ranked as a problem also included Smokeless Tobacco, Teen Alcohol and Drug Abuse, High Blood Pressure, Adult Drug Abuse.

Chart 3
Community Health/ Social Issues
“Yes A Problem”



Results-Additional Stakeholders Questions: Additional questions were added to the stakeholder survey to gain information from the community as it relates to 911 service, head lice, services and programs needed, hospital used, and the need for a Grainger County Health Service Directory.

A. Do you feel head lice is a health and social concern in your community?

YES, A PROBLEM

65%

2% No Response

NO, NOT A PROBLEM

13%

DON'T KNOW

20%

B. Would you be interested in a Grainger County Health Service Directory?

YES

79%

5% No Response

NO

16%

C. What would be the most convenient place to pick up the health service directory?

Sixty-five percent said a health care facility, such as the doctor's office, health department or pharmacy.

D. Do you feel there is need for 911 service in you community?

YES

93%

3% No Response

NO

04%

E. Would you be willing to pay a small fee for this service (911)? 92% said yes.

F. Services and Programs needed in Grainger County.

Parenting Classes	Smoking Cessation Classes	Alcohol Anonymous	Community Center	Social Services	Weight Management Classes	Walking Clubs	Healthy Eating Programs
90	83	96	176	82	126	129	94
(Number of responses)							

G. *Which hospital do you use?

St. Mary's Medical Center	23.8%	Lakeway Regional Hospital	5.0%
Ft. Sanders Regional	21.5%	Jefferson Memorial Hospital	4.4%
Morristown Hamblen	18.2%	Claiborne Hospital	3.3%
UT Memorial Hospital	17.7%	East TN Children's Hospital	2.8%
Baptist East TN	5.5%	Laughlin Memorial Hospital	0.6%

*No local hospital in Grainger County.

2. Behavioral Risk Factor Survey (BRFS)

The BRFS is a randomly selected representative sample of the residents of the county. The survey that was used is a telephone interview survey modeled after the BRFS survey conducted by the Centers for Disease Control. The BRFS collects information from adults on health behaviors and preventive practices related to several leading causes of death such as chronic diseases, injury, and HIV infection.

Adults were randomly selected using random digit-dialed telephone surveys and were questioned about their personal health practices. In addition, they were asked to rate various community health issues. A Likert scale was used with respondents identifying issues as a definite problem, somewhat a problem, not a problem, or not sure.

A sample size of 200 was collected from Grainger County. This allowed estimates made for the county. The overall statistical reliability is a confidence level of $90, \pm 6\%$. Of the respondents, 50% were female and 50% male. This is equivalent to 50% female and 50% male for the population of Grainger County based on the 1990 census (Chart 4).

After review of the data from the BRFS, the council divided the information into three areas. The first area is personal health practices. Five key factors were identified as concerns for the health of the overall community. These issues were then compared to Healthy People: 2000. Table 2 lists the practices of concern with the year 2000 goal for the nation.

Chart 4

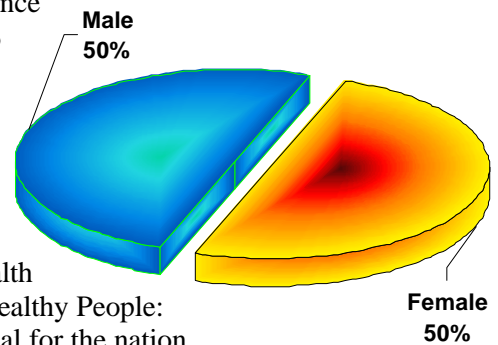


Table 2

Reported Health Practices	BRFS % of Respondents	Year 2000 Goal
Mammogram (had mammogram)	78%	(No Goal)
Smoking (currently smoke)	37%	15%
Have high blood pressure	23%	(No Goal)
Advised to lose weight	18%	(No Goal)
Need to see doctor (but could not due to cost)	16%	15%

The second area is Health Risk and the third area is Access to Care. These two areas were divided into two categories; 1.) Community issues and 2.) Access to health care. Charts 5a and 5b identify the top responses in these two categories

Chart 5a
Community Issues
% Saying “Definite Problem”

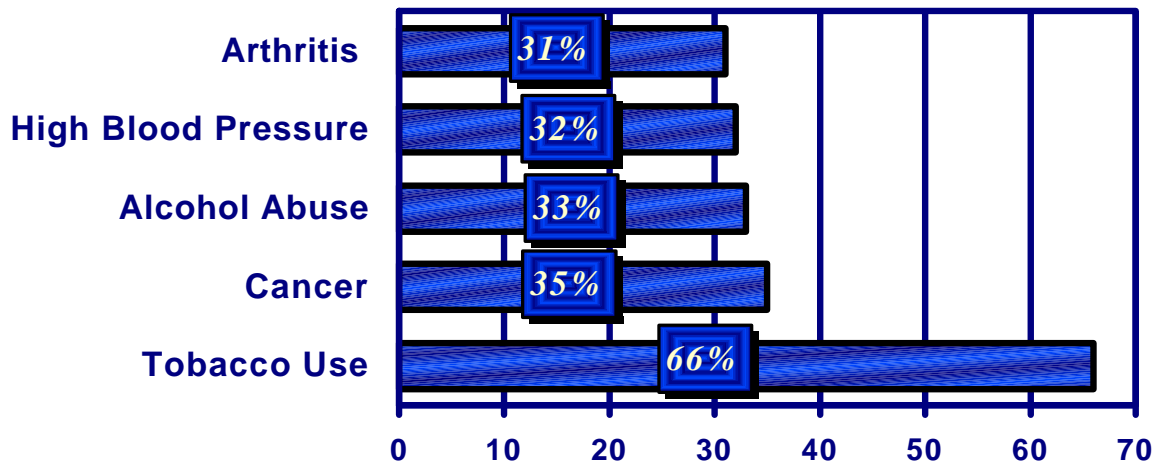
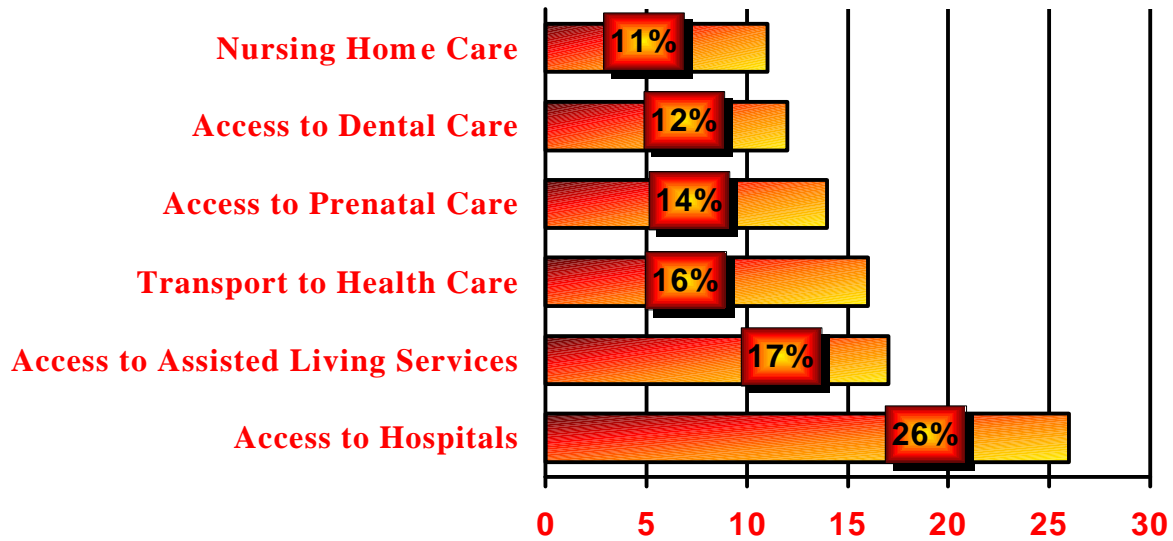


Chart 5b
Access to Health Care
% Saying “Definite Problem”



B. Secondary Data

Information on the health status, health resources, economy, and demographics of Grainger County is essential for understanding the existing health problems in the community. The health council received an extensive set of data for the county, which showed the current health status as well as the available health resources. The secondary data (information already collected from other sources for other purposes) was assembled by the State Office of Assessment and Planning. Data sets that are routinely collected by the Department of Health as well as other state departments and agencies were assembled and distributed to health council members. Socio-economic information was obtained from the Department of Economic and Community Development as well as information from the “Kid’s Count” Report by Tennessee Commission on Children and Youth.

Various mortality and morbidity indicators covering the last 12 years were presented for the county, region, and state. Trend data were presented graphically using three-year moving averages. The three-year moving averages smooth the trend lines and eliminate wide fluctuations in year-to-year rates that distort true trends.

Another section of secondary data included the status of Grainger County on mortality and morbidity indicators and compared the county with the state, nation, and Year 2000 objectives for the nation.

Issues identified by the council from all secondary data were selected primarily on the comparison of the county with the Year 2000 objectives. The issues identified were:

- 1. Coronary Health Disease
- 2. Infant Death
- 3. Lung Cancer
- 4. Motor Vehicle Accidents
- 5. Suicide
- 6. Homicide
- 7. Stroke
- 8. Teen Pregnancy

Table 3
Total 1998 (est.) Population: 19,462
Total Number of Households: 6,394

	County	Region	State
Percent of households that are family households	79.4	76.3	72.7
Percent of households that are families headed by a female with no husband present	9.2	10.6	12.6
Percent of households that are families headed by a female with no husband present and with children under 18 years	4.1	5.4	6.9
Percent of households with the householder 65 and up	22.5	23.6	21.8

**Table 4
Education**

	County	Region	State
Number of persons age 25 and older	11,128	365,673	3,139,066
Percent of persons 25 and up that are high school graduates or higher	46.3	60.8	67.1
Percent of persons 25 and up with a bachelor's degree or higher	4.8	11.1	16.0

**Table 5
Employment**

	County	Region	State
Number of persons 16 and older	13,399	437,649	3,799,725
Percent in work force	58.9	60.1	64.0
Number of persons 16 and older in civilian work force	7,889	262,392	2,405,077
Percent unemployed	6.1	7.8	6.4
Number of females 16 years and older with own children under 6	868	30,082	287,675
Percent in labor force	49.3	57.4	62.9

**Table 6
Poverty Status**

	County	Region	State
Per capita income in 1989	\$8,415	\$10,756	\$12,255
Percent of persons below the 1989 poverty level	20.5	17.10	15.7
Families with children under 18 years, percent with income in 1989 below poverty level	25.9	22.3	20.7
Percent of persons age 65 years and older with income in 1989 below the poverty	28.5	21.1	20.9

STATUS OF GRAINGER COUNTY ON SELECTED YEAR 2000 OBJECTIVES
AGE ADJUSTED MORTALITY RATE PER 100,000 POPULATION

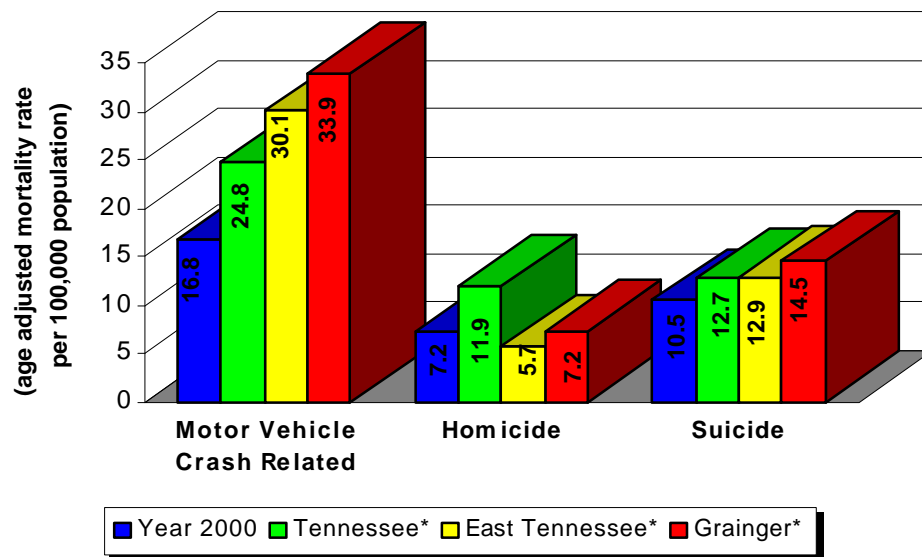


Chart 6a

*Figures for Tennessee, East Tennessee, and Grainger County (Charts 6a & 6b) are a 3-year average from the years 1993 - 1995.

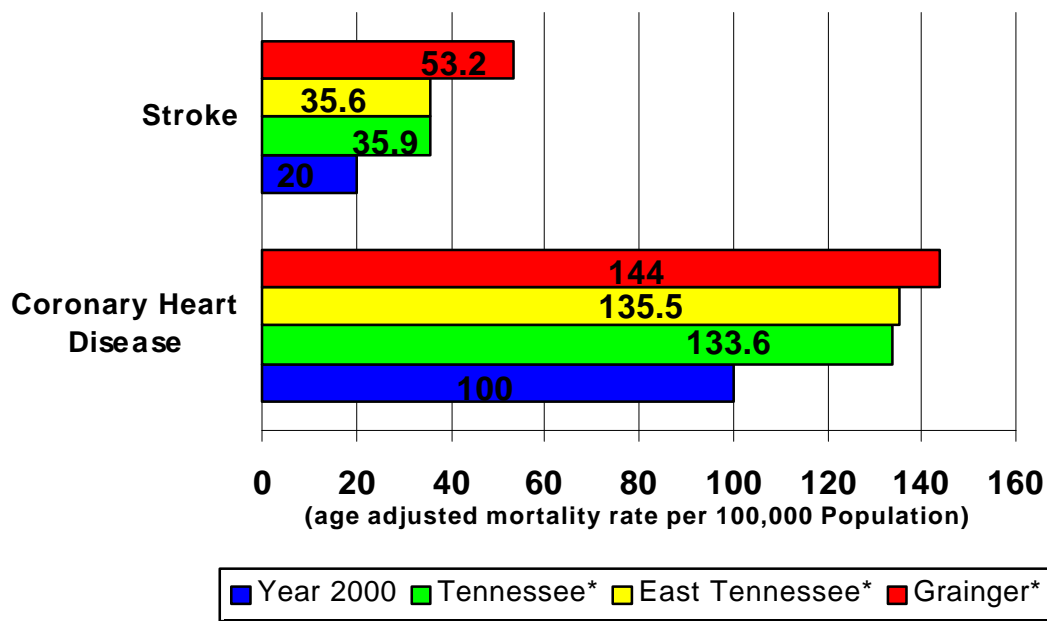
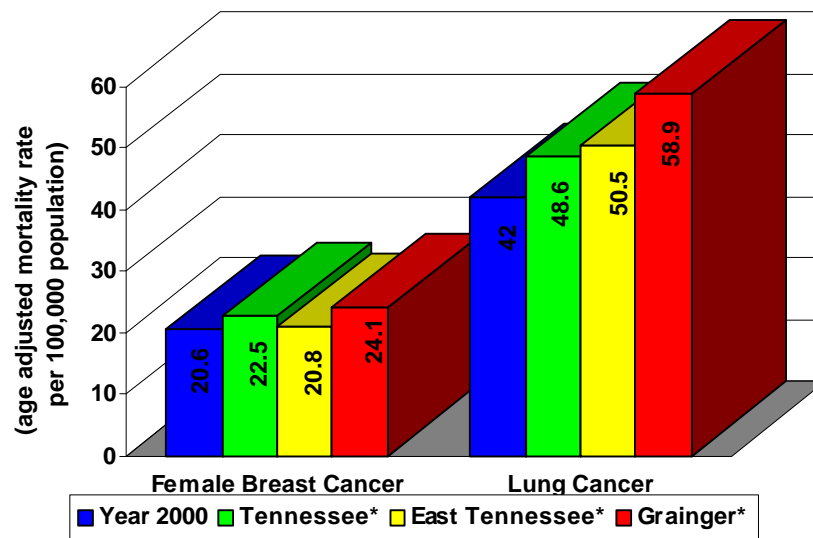


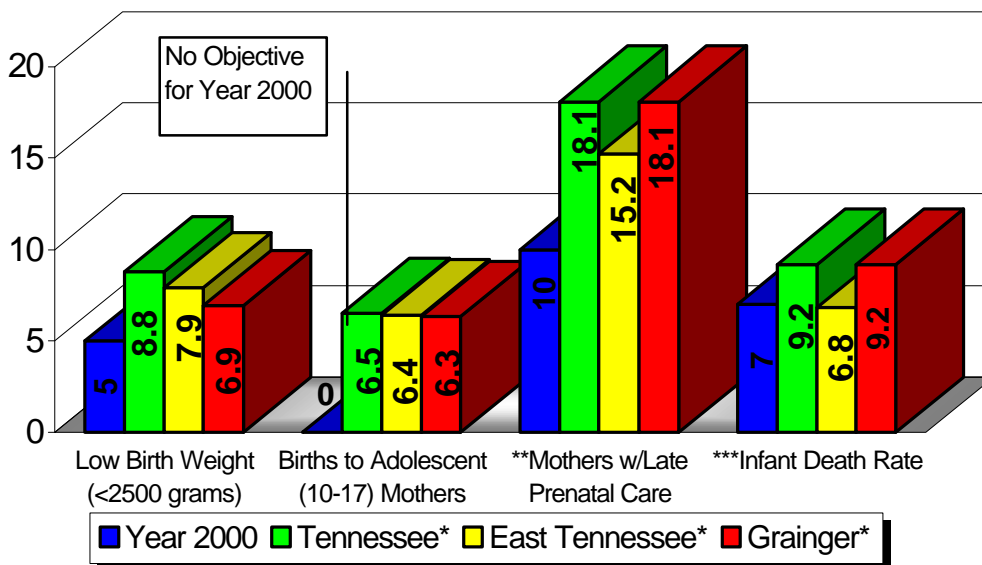
Chart 6b

Chart 7
STATUS OF GRAINGER COUNTY ON SELECTED YEAR 2000 OBJECTIVES
AGE ADJUSTED MORTALITY RATE PER 100,000 POPULATION



*Figures for Tennessee, East Tennessee, and Grainger County are a 3-year average from the years 1993 – 1995.

Chart 8
PERINATAL INDICATORS



*Figures for Tennessee, East Tennessee, and Grainger County are a 3-year average from the years 1993 –1995

**Includes 2nd & 3rd trimester care plus no prenatal care.

***Figures for Infant Death per 1,000 live births.

III. HEALTH ISSUES AND PRIORITIES: IDENTIFICATION AND PRIORITIZATION

At the conclusion of the review of all data from the Community Diagnosis process and other sources, the Grainger County Health Council identified key health issues. A second step was taken to collect more specific data as it related to each of these issues. The health council then ranked each issue according to size, seriousness, and effectiveness of intervention. A final overall ranking was then achieved. Table 7 indicates the health issues in rank order.

Table 7

GRAINGER COUNTY HEALTH ISSUES / PRIORITIES

Rank Order

- **1. EMS-911 SERVICE**
- **2. LACK OF FACILITIES:**
 - **(Healthy lifestyle choices and opportunities)**
- **3. ALCOHOL AND DRUG**
- **4. SMOKING/TOBACCO**
- **5. ACCESS TO HEALTH CARE:**
 - **Mental**
 - **Dental**
 - **Medical**
- **6. SEXUALITY ISSUES:**
 - **Teen Pregnancy**
 - **STD's**
 - **Education**
- **7. HEART CONDITIONS**
- **8. *CANCER**
- ***LACK OF ADDITIONAL HEALTH SERVICES**
- ***MOTOR VEHICLE**

*Tied for #8 priority

IV. FUTURE PLANNING

The Health Planning sub-committee is charged with developing a Grainger County Health Plan. This plan will contain prioritized goals, which will be developed by the health council along with proposed intervention strategies to deal with the problems identified and a listing of resources needed to implement those strategies.

V. REFERENCES

- Board For Licensing HealthCare Facilities, Nashville, TN, *Licensed Nursing Homes in Tennessee Directory*, January 1998.
- Board For Licensing HealthCare Facilities, Nashville, TN, *Licensed Hospitals in Tennessee Directory*, January 1998.
- Community Diagnosis, *A Guide to Health Communities*, June 1996.
- Department of Economic and Community Development, Industrial Development Division, *Tennessee Community Data, Grainger County*.
- East Tennessee Development District, *Economic Statistics, Grainger County*, Spring 1999.
- East Tennessee Regional Health Office, Community Development Division, *Community Stakeholders Survey, Grainger County*, 1998.
- Grainger County, Tennessee, *History of Grainger County*, Available: <http://web.utk.edu/~kizzer/Grainger/history/htm#form>.
- Grainger County Tomato Festival Planning Committee, Grainger County, Tennessee, 1999.
- Hills of Tennessee, Available: <http://www.nostalgiaville.com/hills/tn.html>.
- Tennessee Department of Health Office of Community Development, *Health Statistics*, 1997.
- Tennessee, *Origin of Tennessee County Names*. Available: <http://www.state.tn.us/sos/countys.htm>.
- The University of Tennessee, Knoxville, Center for Business Education Research. *Tennessee. Statistical Abstract 1996/97*.
- The University of Tennessee, Knoxville, Community Health Research Group. Tennessee Department of Health. Tennessee Health Risk Survey, 1995.
- The University of Tennessee, Knoxville, Community Health Research Group (no date). *Health Information Tennessee*. Available: <http://www.server.to/hit>.
- U. S. Department of Commerce, Bureau of the Census, 1990 *Census of Population_General Population Characteristics, Tennessee, and 1990 Census of Population and Housing , Summary_Social, Economic, and Housing Characteristics Tennessee*.

APPENDIX A

APPENDIX A

A. Grainger County Health Council

<i>Vickie Vineyard</i>	<i>Chairperson, Grainger County Health Council,</i>
<i>Nancy Bishop</i>	<i>Douglas Cherokee Health System</i>
<i>Mary Sue Collin</i>	<i>Director, EMS</i>
<i>Diane Combs</i>	<i>Douglas Cherokee Health System</i>
<i>Ronald Combs</i>	<i>Grainger County Schools</i>
<i>Dennis Duck, M.D.</i>	<i>Rutledge Health Center</i>
<i>Lisa Hill</i>	<i>UT Agricultural Extension Service</i>
<i>Linda Hodges</i>	<i>Grainger County Schools</i>
<i>Gary Jackson</i>	<i>Grainger County Schools</i>
<i>Any Jenkins</i>	<i>Douglas Cherokee Health System</i>
<i>Cathy Kerby</i>	<i>Chairperson, 911 Sub-Committee</i>
<i>Jewell Kerr</i>	<i>Washburn Medical Clinic</i>
<i>Mary Lakins</i>	<i>Community Representative</i>
<i>Mary Ruth McGhee</i>	<i>Grainger County Health Department</i>
<i>E.B. McLemore</i>	<i>Juvenile Court</i>
<i>Pamela Purkey</i>	<i>Grainger County Health Department</i>
<i>Mary Russell</i>	<i>Blaine Health Clinic</i>
<i>Tammy Spoon</i>	<i>Counselor, Grainger County Schools</i>
<i>Kristy Walker</i>	<i>Nurse, Grainger County Schools</i>
<i>Lisa Winstead</i>	<i>Counselor, Grainger County Schools</i>

B. Health Information Tennessee (HIT)

The Tennessee Department of Health and The University of Tennessee Community Health Research Group developed Health Information Tennessee (HIT) a web site that was developed in conjunction with the Health Status Report of 1997 to make health related statistical information pertinent to Tennessee available on the Internet. This web site not only provides an assortment of previously calculated health and population statistics, but also allows users an opportunity to query various Tennessee health databases to create personalized charts and tables upon demand. The health data is continually being expanded and updated. You may visit this web site at the following address: www.server.to/hit.

☞ For more information about the Community Diagnosis assessment process, please contact council members or the East Tennessee Community Development Staff at (423) 546-9221.

